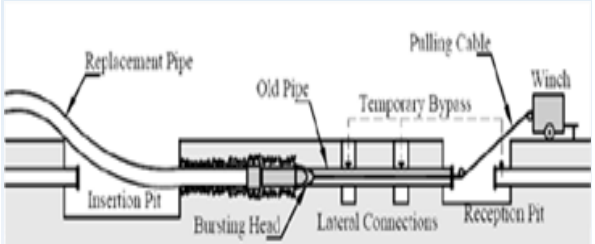
What is Pipe Bursting?

Pipe bursting is method of replacing pipe-line that has met its longevity without trenching the soil. The placed expander head is in front of the old line and pulls the replacement line behind. Expander head breaks up the pipeline into small pieces to ensure the new line has a clear passage.



Regulatory Considerations

The EPA has the ability to accept an "Administrator Approved Alternate" to the Federal standards; however, to-date no process has been approved that would replace the National Emission Standard for Hazardous Air Pollutants (NESHAP), the federal regulations that deal with the management of AC pipe. Industry representatives have met with the EPA since 2010, and are collecting soil contamination and air quality data in an effort to reduce the regulatory requirements in effect for AC pipe. However, congressional approval would be required to change NESHAP that is applicable to managing AC pipe.

Additionally, NESHAP requires deed notations to be made if regulated asbestos remains in the ground; however, public streets and most right-of-ways do not have "deeds" to reflect the presence of this material. Except in cases where deed notations are available, like private property, allowing pipe bursting would therefore be out of compliance with federal regulations.

State considerations include, revising Montana Administrative Rules (ARMs) to allow for the creation of "active waste disposal sites" and after one year of inactivity to allow for "inactive waste disposal sites".

Underground Asbestos Cement Pipe

To Burst or Not to Burst?

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What you need to know

Asbestos Cement Pipe

Asbestos Cement (AC) pipe became a viable option for water, waste-water, and storm drainage systems in the mid-1940s. The material used to make AC pipe included

Portland cement, water, silica and up to 50 percent asbestos fibers. It is estimated that more than 600,000 miles of AC pipe exist in the United States. Pipe installed during the 1950's and 1960's has reached, or is reaching, the end of it's usable life.

Asbestos Regulations

Both the Environmental Protection Agency (EPA) and the State of Montana require an asbestos inspection prior to a demolition or renovation. If the amount of regulated AC pipe found exceeds three linear feet, Montana Administrative Rule (ARM) calls for permitting, fees, accredited workers, clearances, and proper waste disposal to a Class II or IV landfill. Once the threshold is met, continued work on the same site or project is subject to regulatory requirements.

The EPA has addressed pipe bursting in several position documents, stating, "the crushing of AC pipe with mechanical equipment would cause the material to become 'regulated asbestos containing material' and would cause these locations to be considered active waste disposal sites". Future excavations of these "inactive waste disposal sites" expand the notification period from ten working days prior to a renovation, to 45 days.

Pros and Cons

While pipe bursting may reduce short term costs, the long term costs are significant. Asbestos related costs include training of personnel, medical surveillance, project permitting, pollution liability and workers

compensation costs, decontamination of equipment, and potential depreciation of property values. These future considerations should be accounted for in project design cost estimates.

Other Options

Pipes can stay non-regulated by leaving them intact or keeping breakage below the three foot threshold. Non-regulated AC pipe can be removed from the ground or left in place without permitting, deed notations, etc.